

**Remarks:**

Reconsideration of the application is requested. Claims 1, 3-5, and 7-20 are now in the application. Claims 1, 5, and 10 have been amended. Claim 6 has been canceled. Claims 11-20 were withdrawn if Applicants have not successfully traversed the restriction; *see* the arguments below.

**Election/Restriction**

In the final paragraph on page 3 of the Office action, the Examiner restricted the case. Applicants elect Group I (Claims 1 and 3-11), with traverse.

Applicants believe the restriction is no longer proper in light of the amendments to claim 1. Amended claim 1 includes the features of claim 6. Claims 12-20 (in addition to claims 3-11) are believed to describe various aspects of the same invention: namely embodiments of the method of claims 1 or various uses of the non-tangled nanotubes prepared according to claim 1. Accordingly, claims 12-20 should not be withdrawn.

**35 USC § 102 Rejections**

In the third paragraph of page 6 of the Office action, the Examiner rejected claims 1 and 7-8 as being anticipated by Miyano et al. '699. The features of claim 6 have been integrated into claim 1. Accordingly, amended claim 1 is not anticipated by Miyano et al. '699.

Miyano et al. '699 discloses a process for producing a) controlled particle size capsules consisting essentially of b) walls of a waxy material surrounding a core material, c) at a temperature higher than the melting point of the waxy material, while d) allowing the capsules to fall by gravity (claim 1). The core material and the waxy materials are, for example, glutamate or other seasoning (column 2 of Miyano, line 61) coated with paraffin (line 47, *ibid*).

The present invention according to claim 1 differs from the above described disclosure in all of the specified aspects.

- a) The present invention does not relate to a controlled size.

- b) The present "core material", namely carbon nanotubes, is surrounded by water soluble polymers and not by waxy, water insoluble, materials.
- c) The present temperature is not higher than the melting point of the surrounding material, none of the materials is molten.
- d) The carbon nanotubes with adsorbed polymer form stable dispersions and do not settle by gravity even during several months (Example 1, etc.).

The present method would have to be identical with the prior method in all the essential features to be anticipated; however, the method differs in all their features. It is, therefore, respectfully submitted that the amended claims are novel.

### **35 USC S 103(a) Rejections**

In the fourth paragraph on page 6 of the Office action, the Examiner rejected claims 1-11 as being unpatentable over Papadopoulos '162 in view of Grasko '076 under 35 USC § 103(a).

Papadopoulos '162 was cited as mentioning aqueous dispersions (lines 11-18 at column 6). However, this passage describes that "antistatic coatings can be prepared from aqueous dispersions of carbon nanofibers in suitable film-forming binders." This section does mention anywhere a stable dispersion of non-tangled nanotubes; the preparation of any dispersion, let alone a stable dispersion, is not taught by Papadopoulos '162. Papadopoulos '162 does teach electrically-conductive layers (last paragraph, column 16 and first paragraph, column 17); while carbon nanofibers for making said layers are mixed, according to the experimental examples, with three components (synthetic polymers, and other materials called "dispersants", and "surfactants"), as seen in Table I, without checking the properties (for example, homogeneity, stability, etc.) of the dispersion. A water-soluble polymer is generally claimed for making said layers, while specifying silicates, polyurethanes, and several others, without explicitly mentioning polysaccharides or polypeptides. The Examiner observes that Grasko teaches solubility of gum Arabic in water, but this property had been generally known, and by itself would have hardly made one with ordinary skill in the art choose gum Arabic from among all "simple organic compounds having at least one polar group" or from among essentially any soluble or emulsified polymer (claims 3, points a. to

g.). Regardless, one with ordinary skill in the art would be motivated to combine Grasko with Papadopoulos only for making the conductive layers, and not for making stable liquid suspensions which are not related to in any of the cited documents. Gum Arabic, not being recommended for any concrete use in Grasko, is named among more than fifty materials at columns 3-5 some of which are specific (such as polyacrylamide), and some of which are general (such as any simple organic polar compound).

The cited documents do not relate to obtaining single, non-tangled, carbon nanotubes by simple mixing carbon (aggregated) nanotubes with aqueous solution of a polysaccharide or polypeptide in a ratio from 0.05 to 20, followed by the sonication; the cited document do not relate to examining the untangled state of the tubes, and corroborating their single-tube character, as the present invention does (see, for example, paragraph 00026 of the present application); the cited document do not provide stable concentrated fluids comprising untangled nanotubes (see Fig. 3) having, for example, 2-3 nm in diameter (par. 00026).

Accordingly, amended claim 1 would not be obvious to one with ordinary skill in the art reading Papadopoulos '162 in view of Grasko '076 under 35 USC § 103(a).

#### Conclusion

In light of the foregoing remarks, this application is now in condition for allowance and early passage of this case to issue is respectfully requested. If any questions remain regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

Petition for extension is herewith made. The extension fee for response within a period of two months pursuant to Section 1.136(a) in the amount of \$225 in accordance with Section 1.17 is enclosed herewith. The fee for a RCE is also believed to be due and is also enclosed herewith.

Applicants: Yerushalmi-Rozen et al.  
Application No.: 10/667,204  
Examiner: McCracken

No additional fee is believed due. However, please charge any required fee (or credit any overpayments of fees) to the Deposit Account of the undersigned, Account No. 500601 (Docket No. 7640-X03-011).

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'P. Fleit', with a stylized flourish at the end.

Martin Fleit, Reg. No. 16,900

By PAUL D. BIANCO #43,500

Customer Number: 27317

FLEIT KAIN GIBBONS GUTMAN BONGINI & BLANCO  
21355 East Dixie Highway, Suite 115  
Miami, Florida 33180  
Tel: 305-830-2600; Fax: 305-830-2605  
e-mail: LPearson@FocusOnIP.com